



SEQUENCE LISTING

P011073us seq list updated.ST25.txt

<110> Lorantis Ltd.

<120> Modulations of Notch signalling for use in Immunotherapy

<130> P011073US

<140> 10/764,415

<141> 2004-07-23

<150> GB0118153.6

<151> 2001-07-01

<150> GB0207930.9

<151> 2002-04-05

<150> GB0212283.6

<151> 2002-05-28

<150> GB0212282.8

<151> 2002-05-28

<160> 40

<170> PatentIn version 3.0

<210> 1

<211> 43

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1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa
20 25 30

Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys
35 40

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1				5						10					15	
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
			20					25					30			
Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys					
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1				5					10					15	
Arg	Xaa	Asp	Xaa	Phe	Gly	His	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Gly	Xaa	Xaa
		20					25						30		
Xaa	Cys	Xaa	Xaa	Gly	Trp	Xaa	Gly	Xaa	Xaa	Cys					
		35					40								

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Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	20	25	30	
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	35	40	45	
Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	50	55	60	
Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	65	70	75	80
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	85	90	95	
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	100	105	110	
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	115	120	125	
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	130	135	140	
Cys	Xaa	Xaa	Gly	Ala	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	145	150	155	160
Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Gly	Xaa	Xaa	Cys	Xaa	Xaa	165	170	175	

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 ccatccaatc ggtagtagcg 20

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ggctgcacct gctgggtctg c 21

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Gly Phe Lys Val Ser Glu Ala Ser Lys Lys Lys Arg Arg Glu Pro Leu
20 25 30

Gly Glu Asp Ser Val Gly Leu Lys Pro Leu Lys Asn Ala Ser Asp Gly
35 40 45

Ala Leu Met Asp Asp Asn Gln Asn Glu Trp Gly Asp Glu Asp Leu Glu
50 55 60

Thr Lys Lys Phe Arg Phe Glu Glu Pro Val Val Leu Pro Asp Leu Asp
65 70 75 80

Asp Gln Thr Asp His Arg Gln Trp Thr Gln Gln His Leu Asp Ala Ala
85 90 95

Asp Leu Arg Met Ser Ala Met Ala Pro Thr Pro Pro Gln Gly Glu Val
100 105 110

Asp Ala Asp Cys Met Asp Val Asn Val Arg Gly Pro Asp Gly Phe Thr
115 120 125

Pro Leu Met Ile Ala Ser Cys Ser Gly Gly Gly Leu Glu Thr Gly Asn
130 135 140

Ser Glu Glu Glu Glu Asp Ala Pro Ala Val Ile Ser Asp Phe Ile Tyr
145 150 155 160

Gln Gly Ala Ser Leu His Asn Gln Thr Asp Arg Thr Gly Glu Thr Ala
165 170 175

Leu His Leu Ala Ala Arg Tyr Ser Arg Ser Asp Ala Ala Lys Arg Leu
180 185 190

Leu Glu Ala Ser Ala Asp Ala Asn Ile Gln Asp Asn Met Gly Arg Thr
195 200 205

Pro Leu His Ala Ala Val Ser Ala Asp Ala Gln Gly Val Phe Gln Ile
210 215 220

Leu Ile Arg Asn Arg Ala Thr Asp Leu Asp Ala Arg Met His Asp Gly
225 230 235 240

Thr Thr Pro Leu Ile Leu Ala Ala Arg Leu Ala Val Glu Gly Met Leu
245 250 255

Glu Asp Leu Ile Asn Ser His Ala Asp Val Asn Ala Val Asp Asp Leu
260 265 270

P11073us seq list updated.ST25.txt

Gly	Lys	Ser	Ala	Leu	His	Trp	Ala	Ala	Ala	Val	Asn	Asn	Val	Asp	Ala
		275					280					285			
Ala	Val	Val	Leu	Leu	Lys	Asn	Gly	Ala	Asn	Lys	Asp	Met	Gln	Asn	Asn
	290					295					300				
Arg	Glu	Glu	Thr	Pro	Leu	Phe	Leu	Ala	Ala	Arg	Glu	Gly	Ser	Tyr	Glu
305					310					315					320
Thr	Ala	Lys	Val	Leu	Leu	Asp	His	Phe	Ala	Asn	Arg	Asp	Ile	Thr	Asp
			325					330						335	
His	Met	Asp	Arg	Leu	Pro	Arg	Asp	Ile	Ala	Gln	Glu	Arg	Met	His	His
		340						345					350		
Asp	Ile	Val	Arg	Leu	Leu	Asp	Glu	Tyr	Asn	Leu	Val	Arg	Ser	Pro	Gln
	355						360					365			
Leu	His	Gly	Ala	Pro	Leu	Gly	Gly	Thr	Pro	Thr	Leu	Ser	Pro	Pro	Leu
	370					375					380				
Cys	Ser	Pro	Asn	Gly	Tyr	Leu	Gly	Ser	Leu	Lys	Pro	Gly	Val	Gln	Gly
385					390					395					400
Lys	Lys	Val	Arg	Lys	Pro	Ser	Ser	Lys	Gly	Leu	Ala	Cys	Gly	Ser	Lys
				405					410					415	
Glu	Ala	Lys	Asp	Leu	Lys	Ala	Arg	Arg	Lys	Lys	Ser	Gln	Asp	Gly	Lys
			420					425					430		
Gly	Cys	Leu	Leu	Asp	Ser	Ser	Gly	Met	Leu	Ser	Pro	Val	Asp	Ser	Leu
		435					440					445			
Glu	Ser	Pro	His	Gly	Tyr	Leu	Ser	Asp	Val	Ala	Ser	Pro	Pro	Leu	Leu
	450					455					460				
Pro	Ser	Pro	Phe	Gln	Gln	Ser	Pro	Ser	Val	Pro	Leu	Asn	His	Leu	Pro
465					470					475					480
Gly	Met	Pro	Asp	Thr	His	Leu	Gly	Ile	Gly	His	Leu	Asn	Val	Ala	Ala
				485					490					495	
Lys	Pro	Glu	Met	Ala	Ala	Leu	Gly	Gly	Gly	Gly	Arg	Leu	Ala	Phe	Glu
			500					505					510		
Thr	Gly	Pro	Pro	Arg	Leu	Ser	His	Leu	Pro	Val	Ala	Ser	Gly	Thr	Ser
		515					520					525			
Thr	Val	Leu	Gly	Ser	Ser	Ser	Gly	Gly	Ala	Leu	Asn	Phe	Thr	Val	Gly
	530					535					540				
Gly	Ser	Thr	Ser	Leu	Asn	Gly	Gln	Cys	Glu	Trp	Leu	Ser	Arg	Leu	Gln
545					550					555					560
Ser	Gly	Met	Val	Pro	Asn	Gln	Tyr	Asn	Pro	Leu	Arg	Gly	Ser	Val	Ala
				565					570					575	
Pro	Gly	Pro	Leu	Ser	Thr	Gln	Ala	Pro	Ser	Leu	Gln	His	Gly	Met	Val
			580					585					590		
Gly	Pro	Leu	His	Ser	Ser	Leu	Ala	Ala	Ser	Ala	Leu	Ser	Gln	Met	Met
		595					600					605			
Ser	Tyr	Gln	Gly	Leu	Pro	Ser	Thr	Arg	Leu	Ala	Thr	Gln	Pro	His	Leu
	610					615					620				
Val	Gln	Thr	Gln	Gln	Val	Gln	Pro	Gln	Asn	Leu	Gln	Met	Gln	Gln	Gln
625					630					635					640

P11073us seq list updated.ST25.txt

Asn Leu Gln Pro Ala Asn Ile Gln Gln Gln Gln Ser Leu Gln Pro Pro
645 650 655

Pro Pro Pro Pro Gln Pro His Leu Gly Val Ser Ser Ala Ala Ser Gly
660 665 670

His Leu Gly Arg Ser Phe Leu Ser Gly Glu Pro Ser Gln Ala Asp Val
675 680 685

Gln Pro Leu Gly Pro Ser Ser Leu Ala Val His Thr Ile Leu Pro Gln
690 695 700

Glu Ser Pro Ala Leu Pro Thr Ser Leu Pro Ser Ser Leu Val Pro Pro
705 710 715 720

Val Thr Ala Ala Gln Phe Leu Thr Pro Pro Ser Gln His Ser Tyr Ser
725 730 735

Ser Pro Val Asp Asn Thr Pro Ser His Gln Leu Gln Val Pro Glu His
740 745 750

Pro Phe Leu Thr Pro Ser Pro Glu Ser Pro Asp Gln Trp Ser Ser Ser
755 760 765

Ser Pro His Ser Asn Val Ser Asp Trp Ser Glu Gly Val Ser Ser Pro
770 775 780

Pro Thr Ser Met Gln Ser Gln Ile Ala Arg Ile Pro Glu Ala Phe Lys
785 790 795 800

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<212> PRT

<213> Drosophila sp.

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Trp Lys Thr Asn Lys Ser Glu Ser Gln Tyr Thr Ser Leu Glu Tyr Asp
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Phe Arg Val Thr Cys Asp Leu Asn Tyr Tyr Gly Ser Gly Cys Ala Lys
20 25 30

Phe Cys Arg Pro Arg Asp Asp Ser Phe Gly His Ser Thr Cys Ser Glu
35 40 45

Thr Gly Glu Ile Ile Cys Leu Thr Gly Trp Gln Gly Asp Tyr Cys
50 55 60

<210> 19

<211> 63

<212> PRT

<213> Homo sapiens

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Trp Ser Gln Asp Leu His Ser Ser Gly Arg Thr Asp Leu Lys Tyr Ser
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Tyr Arg Phe Val Cys Asp Glu His Tyr Tyr Gly Glu Gly Cys Ser Val

20

25

30

Phe Cys Arg Pro Arg Asp Asp Ala Phe Gly His Phe Thr Cys Gly Glu
 35 40 45

Arg Gly Glu Lys Val Cys Asn Pro Gly Trp Lys Gly Pro Tyr Cys
 50 55 60

<210> 20

<211> 63

<212> PRT

<213> Mus musculus

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Trp Ser Gln Asp Leu His Ser Ser Gly Arg Thr Asp Leu Arg Tyr Ser
 1 5 10 15

Tyr Arg Phe Val Cys Asp Glu His Tyr Tyr Gly Glu Gly Cys Ser Val
 20 25 30

Phe Cys Arg Pro Arg Asp Asp Ala Phe Gly His Phe Thr Cys Gly Asp
 35 40 45

Arg Gly Glu Lys Met Cys Asp Pro Gly Trp Lys Gly Gln Tyr Cys
 50 55 60

<210> 21

<211> 63

<212> PRT

<213> Rattus rattus

<400> 21

Trp Ser Gln Asp Leu His Ser Ser Gly Arg Thr Asp Leu Arg Tyr Ser
 1 5 10 15

Tyr Arg Phe Val Cys Asp Glu His Tyr Tyr Gly Glu Gly Cys Ser Val
 20 25 30

Phe Cys Arg Pro Arg Asp Asp Ala Phe Gly His Phe Thr Cys Gly Glu
 35 40 45

Arg Gly Glu Lys Met Cys Asp Pro Gly Trp Lys Gly Gln Tyr Cys
 50 55 60

<210> 22

<211> 63

<212> PRT

<213> Mus musculus

<400> 22

Trp Arg Thr Asp Glu Gln Asn Asp Thr Leu Thr Arg Leu Ser Tyr Ser
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P11073us seq list updated.ST25.txt

Tyr Arg Val Ile Cys Ser Asp Asn Tyr Tyr Gly Glu Ser Cys Ser Arg
20 25 30

Leu Cys Lys Lys Arg Asp Asp His Phe Gly His Tyr Glu Cys Gln Pro
35 40 45

Asp Gly Ser Leu Ser Cys Leu Pro Gly Trp Thr Gly Lys Tyr Cys
50 55 60

<210> 23

<211> 63

<212> PRT

<213> Homo sapiens

<400> 23

Trp Leu Leu Asp Glu Gln Thr Ser Thr Leu Thr Arg Leu Arg Tyr Ser
1 5 10 15

Tyr Arg Val Ile Cys Ser Asp Asn Tyr Tyr Gly Asp Asn Cys Ser Arg
20 25 30

Leu Cys Lys Lys Arg Asn Asp His Phe Gly His Tyr Val Cys Gln Pro
35 40 45

Asp Gly Asn Leu Ser Cys Leu Pro Gly Trp Thr Gly Glu Tyr Cys
50 55 60

<210> 24

<211> 63

<212> PRT

<213> Rattus rattus

<400> 24

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1 5 10 15

Ile Arg Val Thr Cys Asp Asp His Tyr Tyr Gly Phe Gly Cys Asn Lys
20 25 30

Phe Cys Arg Pro Arg Asp Asp Phe Phe Gly His Tyr Ala Cys Asp Gln
35 40 45

Asn Gly Asn Lys Thr Cys Met Glu Gly Trp Met Gly Pro Glu Cys
50 55 60

<210> 25

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<213> Mus musculus

<400> 25

P11073us seq list updated.ST25.txt

Trp Gln Thr Leu Lys Gln Asn Thr Gly Ile Ala His Phe Glu Tyr Gln
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Ile Arg Val Thr Cys Asp Asp His Tyr Tyr Gly Phe Gly Cys Asn Lys
20 25 30

Phe Cys Arg Pro Arg Asp Asp Phe Phe Gly His Tyr Ala Cys Asp Gln
35 40 45

Asn Gly Asn Lys Thr Cys Met Glu Gly Trp Met Gly Pro Asp Cys
50 55 60

<210> 26

<211> 63

<212> PRT

<213> Homo sapiens

<400> 26

Trp Gln Thr Leu Lys Gln Asn Thr Gly Val Ala His Phe Glu Tyr Gln
1 5 10 15

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20 25 30

Phe Cys Arg Pro Arg Asp Asp Phe Phe Gly His Tyr Ala Cys Asp Gln
35 40 45

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50 55 60

<210> 27

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<212> PRT

<213> Gallus sp.

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Trp Gln Thr Leu Lys His Asn Thr Gly Ala Ala His Phe Glu Tyr Gln
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Ile Arg Val Thr Cys Ala Glu His Tyr Tyr Tyr Gly Phe Gly Cys Asn Lys
20 25 30

Phe Cys Arg Pro Arg Asp Asp Phe Phe Thr His His Thr Cys Asp Gln
35 40 45

Asn Gly Asn Lys Thr Cys Leu Glu Gly Trp Thr Gly Pro Glu Cys
50 55 60

<210> 28

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<212> PRT

<213> Gallus sp.

<400> 28

Trp Lys Thr Leu Gln Phe Asn Gly Pro Val Ala Asn Phe Glu Val Gln
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 Ile Arg Val Lys Cys Asp Glu Asn Tyr Tyr Ser Ala Leu Cys Asn Lys
 20 25 30
 Phe Cys Gly Pro Arg Asp Asp Phe Val Gly His Tyr Thr Cys Asp Gln
 35 40 45
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<210> 29

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<213> Mus musculus

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 20 25 30
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 35 40 45
 Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys
 50 55 60

<210> 30

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Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu Gln
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 20 25 30
 Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp Gln
 35 40 45
 Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys
 50 55 60

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Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu Gln
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      20      25      30
Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp Gln
      35      40      45
Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys
      50      55      60

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<210> 32

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<400> 32

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Trp Lys Ser Leu His Phe Ser Gly His Val Ala His Leu Glu Leu Gln
1      5      10      15
Ile Arg Val Arg Cys Asp Glu Asn Tyr Tyr Ser Ala Thr Cys Asn Lys
      20      25      30
Phe Cys Arg Pro Arg Asn Asp Phe Phe Gly His Tyr Thr Cys Asp Gln
      35      40      45
Tyr Gly Asn Lys Ala Cys Met Asp Gly Trp Met Gly Lys Glu Cys
      50      55      60

```

<210> 33

<211> 63

<212> PRT

<213> Drosophila melanogaster

<400> 33

```

Trp Lys Thr Leu Asp His Ile Gly Arg Asn Ala Arg Ile Thr Tyr Arg
1      5      10      15
Val Arg Val Gln Cys Ala Val Thr Tyr Tyr Asn Thr Thr Cys Thr Thr
      20      25      30
Phe Cys Arg Pro Arg Asp Asp Gln Phe Gly His Tyr Ala Cys Gly Ser
      35      40      45
Glu Gly Gln Lys Leu Cys Leu Asn Gly Trp Gln Gly Val Asn Cys
      50      55      60

```

<210> 34

<211> 723

<212> PRT

<213> Homo sapiens

<400> 34

```

Met Gly Ser Arg Cys Ala Leu Ala Leu Ala Val Leu Ser Ala Leu Leu
 1      5      10      15
Cys Gln Val Trp Ser Ser Gly Val Phe Glu Leu Lys Leu Gln Glu Phe
 20      25      30
Val Asn Lys Lys Gly Leu Leu Gly Asn Arg Asn Cys Cys Arg Gly Gly
 35      40      45
Ala Gly Pro Pro Pro Cys Ala Cys Arg Thr Phe Phe Arg Val Cys Leu
 50      55      60
Lys His Tyr Gln Ala Ser Val Ser Pro Glu Pro Cys Thr Tyr Gly
 65      70      75      80
Ser Ala Val Thr Pro Val Leu Gly Val Asp Ser Phe Ser Leu Pro Asp
 85      90      95
Gly Gly Gly Ala Asp Ser Ala Phe Ser Asn Pro Ile Arg Phe Pro Phe
100      105      110
Gly Phe Thr Trp Pro Gly Thr Phe Ser Leu Ile Ile Glu Ala Leu His
115      120      125
Thr Asp Ser Pro Asp Asp Leu Ala Thr Glu Asn Pro Glu Arg Leu Ile
130      135      140
Ser Arg Leu Ala Thr Gln Arg His Leu Thr Val Gly Glu Glu Trp Ser
145      150      155      160
Gln Asp Leu His Ser Ser Gly Arg Thr Asp Leu Lys Tyr Ser Tyr Arg
165      170      175
Phe Val Cys Asp Glu His Tyr Tyr Gly Glu Gly Cys Ser Val Phe Cys
180      185      190
Arg Pro Arg Asp Asp Ala Phe Gly His Phe Thr Cys Gly Glu Arg Gly
195      200      205
Glu Lys Val Cys Asn Pro Gly Trp Lys Gly Pro Tyr Cys Thr Glu Pro
210      215      220
Ile Cys Leu Pro Gly Cys Asp Glu Gln His Gly Phe Cys Asp Lys Pro
225      230      235      240
Gly Glu Cys Lys Cys Arg Val Gly Trp Gln Gly Arg Tyr Cys Asp Glu
245      250      255
Cys Ile Arg Tyr Pro Gly Cys Leu His Gly Thr Cys Gln Gln Pro Trp
260      265      270
Gln Cys Asn Cys Gln Glu Gly Trp Gly Gly Leu Phe Cys Asn Gln Asp
275      280      285
Leu Asn Tyr Cys Thr His His Lys Pro Cys Lys Asn Gly Ala Thr Cys
290      295      300
Thr Asn Thr Gly Gln Gly Ser Tyr Thr Cys Ser Cys Arg Pro Gly Tyr
305      310      315      320
Thr Gly Ala Thr Cys Glu Leu Gly Ile Asp Glu Cys Asp Pro Ser Pro
325      330      335
Cys Lys Asn Gly Gly Ser Cys Thr Asp Leu Glu Asn Ser Tyr Ser Cys

```

340	345	350																	
Thr Cys Pro Pro Gly Phe Tyr Gly Lys Ile Cys Glu Leu Ser Ala Met																			
355						360					365								
Thr Cys Ala Asp Gly Pro Cys Phe Asn Gly Gly Arg Cys Ser Asp Ser						375					380								
370																			
Pro Asp Gly Gly Tyr Ser Cys Arg Cys Pro Val Gly Tyr Ser Gly Phe						390					395								400
385																			
Asn Cys Glu Lys Lys Ile Asp Tyr Cys Ser Ser Ser Pro Cys Ser Asn						405				410									415
Gly Ala Lys Cys Val Asp Leu Gly Asp Ala Tyr Leu Cys Arg Cys Gln						420			425						430				
Ala Gly Phe Ser Gly Arg His Cys Asp Asp Asn Val Asp Asp Cys Ala						435			440					445					
Ser Ser Pro Cys Ala Asn Gly Gly Thr Cys Arg Asp Gly Val Asn Asp						450			455				460						
Phe Ser Cys Thr Cys Pro Pro Gly Tyr Thr Gly Arg Asn Cys Ser Ala						465			470			475							480
Pro Val Ser Arg Cys Glu His Ala Pro Cys His Asn Gly Ala Thr Cys						485				490									495
His Glu Arg Gly His Gly Tyr Val Cys Glu Cys Ala Arg Gly Tyr Gly						500			505						510				
Gly Pro Asn Cys Gln Phe Leu Leu Pro Glu Leu Pro Pro Gly Pro Ala						515			520					525					
Val Val Asp Leu Thr Glu Lys Leu Glu Gly Gln Gly Gly Pro Phe Pro						530			535			540							
Trp Val Ala Val Cys Ala Gly Val Ile Leu Val Leu Met Leu Leu Leu						545			550			555							560
Gly Cys Ala Ala Val Val Val Cys Val Arg Leu Arg Leu Gln Lys His						565				570									575
Arg Pro Pro Ala Asp Pro Cys Arg Gly Glu Thr Glu Thr Met Asn Asn						580			585						590				
Leu Ala Asn Cys Gln Arg Glu Lys Asp Ile Ser Val Ser Ile Ile Gly						595			600						605				
Ala Thr Gln Ile Lys Asn Thr Asn Lys Lys Ala Asp Phe His Gly Asp						610			615				620						
His Ser Ala Asp Lys Asn Gly Phe Lys Ala Arg Tyr Pro Ala Val Asp						625			630			635							640
Tyr Asn Leu Val Gln Asp Leu Lys Gly Asp Asp Thr Ala Val Arg Asp						645				650									655
Ala His Ser Lys Arg Asp Thr Lys Cys Gln Pro Gln Gly Ser Ser Gly						660				665									670
Glu Glu Lys Gly Thr Pro Thr Thr Leu Arg Gly Gly Glu Ala Ser Glu						675				680				685					
Arg Lys Arg Pro Asp Ser Gly Cys Ser Thr Ser Lys Asp Thr Lys Tyr						690			695				700						
Gln Ser Val Tyr Val Ile Ser Glu Glu Lys Asp Glu Cys Val Ile Ala						705			710				715						720

Thr Glu Val

<210> 35

<211> 618

<212> PRT

<213> Homo sapiens

<400> 35

```

Met Val Ser Pro Arg Met Ser Gly Leu Leu Ser Gln Thr Val Ile Leu
1          5          10          15
Ala Leu Ile Phe Leu Pro Gln Thr Arg Pro Ala Gly Val Phe Glu Leu
20        25        30
Gln Ile His Ser Phe Gly Pro Gly Pro Gly Pro Gly Ala Pro Arg Ser
35        40        45
Pro Cys Ser Ala Arg Leu Pro Cys Arg Leu Phe Phe Arg Val Cys Leu
50        55        60
Lys Pro Gly Leu Ser Glu Glu Ala Ala Glu Ser Pro Cys Ala Leu Gly
65        70        75        80
Ala Ala Leu Ser Ala Arg Gly Pro Val Tyr Thr Glu Gln Pro Gly Ala
85        90        95
Pro Ala Pro Asp Leu Pro Leu Pro Asp Gly Leu Leu Gln Val Pro Phe
100       105       110
Arg Asp Ala Trp Pro Gly Thr Phe Ser Phe Ile Ile Glu Thr Trp Arg
115       120       125
Glu Glu Leu Gly Asp Gln Ile Gly Gly Pro Ala Trp Ser Leu Leu Ala
130       135       140
Arg Val Ala Gly Arg Arg Arg Leu Ala Ala Gly Gly Pro Trp Ala Arg
145       150       155       160
Asp Ile Gln Arg Ala Gly Ala Trp Glu Leu Arg Phe Ser Tyr Arg Ala
165       170       175
Arg Cys Glu Pro Pro Ala Val Gly Thr Ala Cys Thr Arg Leu Cys Arg
180       185       190
Pro Arg Ser Ala Pro Ser Arg Cys Gly Pro Gly Leu Arg Pro Cys Ala
195       200       205
Pro Leu Glu Asp Glu Cys Glu Ala Pro Leu Val Cys Arg Ala Gly Cys
210       215       220
Ser Pro Glu His Gly Phe Cys Glu Gln Pro Gly Glu Cys Arg Cys Leu
225       230       235       240
Glu Gly Trp Thr Gly Pro Leu Cys Thr Val Pro Val Ser Thr Ser Ser
245       250       255
Cys Leu Ser Pro Arg Gly Pro Ser Ser Ala Thr Thr Gly Cys Leu Val
260       265       270
Pro Gly Pro Gly Pro Cys Asp Gly Asn Pro Cys Ala Asn Gly Gly Ser
275       280       285

```


Cys Ser Glu Thr Pro Arg Ser Phe Glu Cys Thr Cys Pro Arg Gly Phe
 290 295 300
 Tyr Gly Leu Arg Cys Glu Val Ser Gly Val Thr Cys Ala Asp Gly Pro
 305 310 315 320
 Cys Phe Asn Gly Gly Leu Cys Val Gly Gly Ala Asp Pro Asp Ser Ala
 325 330 335
 Tyr Ile Cys His Cys Pro Pro Gly Phe Gln Gly Ser Asn Cys Glu Lys
 340 345 350
 Arg Val Asp Arg Cys Ser Leu Gln Pro Cys Arg Asn Gly Gly Leu Cys
 355 360 365
 Leu Asp Leu Gly His Ala Leu Arg Cys Arg Cys Arg Ala Gly Phe Ala
 370 375 380
 Gly Pro Arg Cys Glu His Asp Leu Asp Asp Cys Ala Gly Arg Ala Cys
 385 390 395 400
 Ala Asn Gly Gly Thr Cys Val Glu Gly Gly Gly Ala His Arg Cys Ser
 405 410 415
 Cys Ala Leu Gly Phe Gly Gly Arg Asp Cys Arg Glu Arg Ala Asp Pro
 420 425 430
 Cys Ala Ala Arg Pro Cys Ala His Gly Gly Arg Cys Tyr Ala His Phe
 435 440 445
 Ser Gly Leu Val Cys Ala Cys Ala Pro Gly Tyr Met Gly Ala Arg Cys
 450 455 460
 Glu Phe Pro Val His Pro Asp Gly Ala Ser Ala Leu Pro Ala Ala Pro
 465 470 475 480
 Pro Gly Leu Arg Pro Gly Asp Pro Gln Arg Tyr Leu Leu Pro Pro Ala
 485 490 495
 Leu Gly Leu Leu Val Ala Ala Gly Val Ala Gly Ala Ala Leu Leu Leu
 500 505 510
 Val His Val Arg Arg Arg Gly His Ser Gln Asp Ala Gly Ser Arg Leu
 515 520 525
 Leu Ala Gly Thr Pro Glu Pro Ser Val His Ala Leu Pro Asp Ala Leu
 530 535 540
 Asn Asn Leu Arg Thr Gln Glu Gly Ser Gly Asp Gly Pro Ser Ser Ser
 545 550 555 560
 Val Asp Trp Asn Arg Pro Glu Asp Val Asp Pro Gln Gly Ile Tyr Val
 565 570 575
 Ile Ser Ala Pro Ser Ile Tyr Ala Arg Glu Val Ala Thr Pro Leu Phe
 580 585 590
 Pro Pro Leu His Thr Gly Arg Ala Gly Gln Arg Gln His Leu Leu Phe
 595 600 605
 Pro Tyr Pro Ser Ser Ile Leu Ser Val Lys
 610 615
 <210> 36
 <211> 685
 <212> PRT
 <213> Homo sapiens

<400> 36

```

Met Ala Ala Ala Ser Arg Ser Ala Ser Gly Trp Ala Leu Leu Leu Leu
1      5      10      15
Val Ala Leu Trp Gln Gln Arg Ala Ala Gly Ser Gly Val Phe Gln Leu
20      25      30
Gln Leu Gln Glu Phe Ile Asn Glu Arg Gly Val Leu Ala Ser Gly Arg
35      40      45
Pro Cys Glu Pro Gly Cys Arg Thr Phe Phe Arg Val Cys Leu Lys His
50      55      60
Phe Gln Ala Val Val Ser Pro Gly Pro Cys Thr Phe Gly Thr Val Ser
65      70      75      80
Thr Pro Val Leu Gly Thr Asn Ser Phe Ala Val Arg Asp Asp Ser Ser
85      90      95
Gly Gly Gly Arg Asn Pro Leu Gln Leu Pro Phe Asn Phe Thr Trp Pro
100     105     110
Gly Thr Phe Ser Leu Ile Ile Glu Ala Trp His Ala Pro Gly Asp Asp
115     120     125
Leu Arg Pro Glu Ala Leu Pro Pro Asp Ala Leu Ile Ser Lys Ile Ala
130     135     140
Ile Gln Gly Ser Leu Ala Val Gly Gln Asn Trp Leu Leu Asp Glu Gln
145     150     155     160
Thr Ser Thr Leu Thr Arg Leu Arg Tyr Ser Tyr Arg Val Ile Cys Ser
165     170     175
Asp Asn Tyr Tyr Gly Asp Asn Cys Ser Arg Leu Cys Lys Lys Arg Asn
180     185     190
Asp His Phe Gly His Tyr Val Cys Gln Pro Asp Gly Asn Leu Ser Cys
195     200     205
Leu Pro Gly Trp Thr Gly Glu Tyr Cys Gln Gln Pro Ile Cys Leu Ser
210     215     220
Gly Cys His Glu Gln Asn Gly Tyr Cys Ser Lys Pro Ala Glu Cys Leu
225     230     235     240
Cys Arg Pro Gly Trp Gln Gly Arg Leu Cys Asn Glu Cys Ile Pro His
245     250     255
Asn Gly Cys Arg His Gly Thr Cys Ser Thr Pro Trp Gln Cys Thr Cys
260     265     270
Asp Glu Gly Trp Gly Gly Leu Phe Cys Asp Gln Asp Leu Asn Tyr Cys
275     280     285
Thr His His Ser Pro Cys Lys Asn Gly Ala Thr Cys Ser Asn Ser Gly
290     295     300
Gln Arg Ser Tyr Thr Cys Thr Cys Arg Pro Gly Tyr Thr Gly Val Asp
305     310     315     320
Cys Glu Leu Glu Leu Ser Glu Cys Asp Ser Asn Pro Cys Arg Asn Gly
325     330     335
Gly Ser Cys Lys Asp Gln Glu Asp Gly Tyr His Cys Leu Cys Pro Pro
340     345     350

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P11073us seq list updated.ST25.txt

Gly	Tyr	Tyr	Gly	Leu	His	Cys	Glu	His	Ser	Thr	Leu	Ser	Cys	Ala	Asp		
	355						360					365					
Ser	Pro	Cys	Phe	Asn	Gly	Gly	Ser	Cys	Arg	Glu	Arg	Asn	Gln	Gly	Ala		
	370					375					380						
Asn	Tyr	Ala	Cys	Glu	Cys	Pro	Pro	Asn	Phe	Thr	Gly	Ser	Asn	Cys	Glu		
385					390					395					400		
Lys	Lys	Val	Asp	Arg	Cys	Thr	Ser	Asn	Pro	Cys	Ala	Asn	Gly	Gly	Gln		
			405						410					415			
Cys	Leu	Asn	Arg	Gly	Pro	Ser	Arg	Met	Cys	Arg	Cys	Arg	Pro	Gly	Phe		
		420						425					430				
Thr	Gly	Thr	Tyr	Cys	Glu	Leu	His	Val	Ser	Asp	Cys	Ala	Arg	Asn	Pro		
	435						440					445					
Cys	Ala	His	Gly	Gly	Thr	Cys	His	Asp	Leu	Glu	Asn	Gly	Leu	Met	Cys		
	450					455					460						
Thr	Cys	Pro	Ala	Gly	Phe	Ser	Gly	Arg	Arg	Cys	Glu	Val	Arg	Thr	Ser		
465				470						475					480		
Ile	Asp	Ala	Cys	Ala	Ser	Ser	Pro	Cys	Phe	Asn	Arg	Ala	Thr	Cys	Tyr		
			485						490					495			
Thr	Asp	Leu	Ser	Thr	Asp	Thr	Phe	Val	Cys	Asn	Cys	Pro	Tyr	Gly	Phe		
		500					505						510				
Val	Gly	Ser	Arg	Cys	Glu	Phe	Pro	Val	Gly	Leu	Pro	Pro	Ser	Phe	Pro		
	515						520					525					
Trp	Val	Ala	Val	Ser	Leu	Gly	Val	Gly	Leu	Ala	Val	Leu	Leu	Val	Leu		
	530					535					540						
Leu	Gly	Met	Val	Ala	Val	Ala	Val	Arg	Gln	Leu	Arg	Leu	Arg	Arg	Pro		
545				550						555					560		
Asp	Asp	Gly	Ser	Arg	Glu	Ala	Met	Asn	Asn	Leu	Ser	Asp	Phe	Gln	Lys		
			565						570					575			
Asp	Asn	Leu	Ile	Pro	Ala	Ala	Gln	Leu	Lys	Asn	Thr	Asn	Gln	Lys	Lys		
		580						585					590				
Glu	Leu	Glu	Val	Asp	Cys	Gly	Leu	Asp	Lys	Ser	Asn	Cys	Gly	Lys	Gln		
	595						600					605					
Gln	Asn	His	Thr	Leu	Asp	Tyr	Asn	Leu	Ala	Pro	Gly	Pro	Leu	Gly	Arg		
	610					615					620						
Gly	Thr	Met	Pro	Gly	Lys	Phe	Pro	His	Ser	Asp	Lys	Ser	Leu	Gly	Glu		
625				630						635					640		
Lys	Ala	Pro	Leu	Arg	Leu	His	Ser	Glu	Lys	Pro	Glu	Cys	Arg	Ile	Ser		
			645						650					655			
Ala	Ile	Cys	Ser	Pro	Arg	Asp	Ser	Met	Tyr	Gln	Ser	Val	Cys	Leu	Ile		
		660						665					670				
Ser	Glu	Glu	Arg	Asn	Glu	Cys	Val	Ile	Ala	Thr	Glu	Val					
	675						680					685					
<210>	37																
<211>	1218																
<212>	PRT																

<213> Homo sapiens

<400> 37

```

Met Arg Ser Pro Arg Thr Arg Gly Arg Ser Gly Arg Pro Leu Ser Leu
1      5      10      15
Leu Leu Ala Leu Leu Cys Ala Leu Arg Ala Lys Val Cys Gly Ala Ser
20      25      30
Gly Gln Phe Glu Leu Glu Ile Leu Ser Met Gln Asn Val Asn Gly Glu
35      40      45
Leu Gln Asn Gly Asn Cys Cys Gly Gly Ala Arg Asn Pro Gly Asp Arg
50      55      60
Lys Cys Thr Arg Asp Glu Cys Asp Thr Tyr Phe Lys Val Cys Leu Lys
65      70      75      80
Glu Tyr Gln Ser Arg Val Thr Ala Gly Gly Pro Cys Ser Phe Gly Ser
85      90      95
Gly Ser Thr Pro Val Ile Gly Gly Asn Thr Phe Asn Leu Lys Ala Ser
100     105     110
Arg Gly Asn Asp Arg Asn Arg Ile Val Leu Pro Phe Ser Phe Ala Trp
115     120     125
Pro Arg Ser Tyr Thr Leu Leu Val Glu Ala Trp Asp Ser Ser Asn Asp
130     135     140
Thr Val Gln Pro Asp Ser Ile Ile Glu Lys Ala Ser His Ser Gly Met
145     150     155     160
Ile Asn Pro Ser Arg Gln Trp Gln Thr Leu Lys Gln Asn Thr Gly Val
165     170     175
Ala His Phe Glu Tyr Gln Ile Arg Val Thr Cys Asp Asp Tyr Tyr Tyr
180     185     190
Gly Phe Gly Cys Asn Lys Phe Cys Arg Pro Arg Asp Asp Phe Phe Gly
195     200     205
His Tyr Ala Cys Asp Gln Asn Gly Asn Lys Thr Cys Met Glu Gly Trp
210     215     220
Met Gly Pro Glu Cys Asn Arg Ala Ile Cys Arg Gln Gly Cys Ser Pro
225     230     235     240
Lys His Gly Ser Cys Lys Leu Pro Gly Asp Cys Arg Cys Gln Tyr Gly
245     250     255
Trp Gln Gly Leu Tyr Cys Asp Lys Cys Ile Pro His Pro Gly Cys Val
260     265     270
His Gly Ile Cys Asn Glu Pro Trp Gln Cys Leu Cys Glu Thr Asn Trp
275     280     285
Gly Gly Gln Leu Cys Asp Lys Asp Leu Asn Tyr Cys Gly Thr His Gln
290     295     300
Pro Cys Leu Asn Gly Gly Thr Cys Ser Asn Thr Gly Pro Asp Lys Tyr
305     310     315     320
Gln Cys Ser Cys Pro Glu Gly Tyr Ser Gly Pro Asn Cys Glu Ile Ala
325     330     335
Glu His Ala Cys Leu Ser Asp Pro Cys His Asn Arg Gly Ser Cys Lys

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P11073us seq list updated.ST25.txt

340	345	350																	
Glu Thr Ser Leu Gly Phe Glu Cys Glu Cys Ser Pro Gly Trp Thr Gly																			
355	360	365																	
Pro Thr Cys Ser Thr Asn Ile Asp Asp Cys Ser Pro Asn Asn Cys Ser																			
370	375	380																	
His Gly Gly Thr Cys Gln Asp Leu Val Asn Gly Phe Lys Cys Val Cys																			
385	390	395																	400
Pro Pro Gln Trp Thr Gly Lys Thr Cys Gln Leu Asp Ala Asn Glu Cys																			
	405	410																	415
Glu Ala Lys Pro Cys Val Asn Ala Lys Ser Cys Lys Asn Leu Ile Ala																			
	420	425																	430
Ser Tyr Tyr Cys Asp Cys Leu Pro Gly Trp Met Gly Gln Asn Cys Asp																			
	435	440																	445
Ile Asn Ile Asn Asp Cys Leu Gly Gln Cys Gln Asn Asp Ala Ser Cys																			
	450	455																	460
Arg Asp Leu Val Asn Gly Tyr Arg Cys Ile Cys Pro Pro Gly Tyr Ala																			
	465	470																	480
Gly Asp His Cys Glu Arg Asp Ile Asp Glu Cys Ala Ser Asn Pro Cys																			
	485	490																	495
Leu Asn Gly Gly His Cys Gln Asn Glu Ile Asn Arg Phe Gln Cys Leu																			
	500	505																	510
Cys Pro Thr Gly Phe Ser Gly Asn Leu Cys Gln Leu Asp Ile Asp Tyr																			
	515	520																	525
Cys Glu Pro Asn Pro Cys Gln Asn Gly Ala Gln Cys Tyr Asn Arg Ala																			
	530	535																	540
Ser Asp Tyr Phe Cys Lys Cys Pro Glu Asp Tyr Glu Gly Lys Asn Cys																			
	545	550																	560
Ser His Leu Lys Asp His Cys Arg Thr Thr Pro Cys Glu Val Ile Asp																			
	565	570																	575
Ser Cys Thr Val Ala Met Ala Ser Asn Asp Thr Pro Glu Gly Val Arg																			
	580	585																	590
Tyr Ile Ser Ser Asn Val Cys Gly Pro His Gly Lys Cys Lys Ser Gln																			
	595	600																	605
Ser Gly Gly Lys Phe Thr Cys Asp Cys Asn Lys Gly Phe Thr Gly Thr																			
	610	615																	620
Tyr Cys His Glu Asn Ile Asn Asp Cys Glu Ser Asn Pro Cys Arg Asn																			
	625	630																	640
Gly Gly Thr Cys Ile Asp Gly Val Asn Ser Tyr Lys Cys Ile Cys Ser																			
	645	650																	655
Asp Gly Trp Glu Gly Ala Tyr Cys Glu Thr Asn Ile Asn Asp Cys Ser																			
	660	665																	670
Gln Asn Pro Cys His Asn Gly Gly Thr Cys Arg Asp Leu Val Asn Asp																			
	675	680																	685
Phe Tyr Cys Asp Cys Lys Asn Gly Trp Lys Gly Lys Thr Cys His Ser																			
	690	695																	700
Arg Asp Ser Gln Cys Asp Glu Ala Thr Cys Asn Asn Gly Gly Thr Cys																			
	705	710																	720

P11073us seq list updated.ST25.txt

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Tyr Asp Glu Gly Asp Ala Phe Lys Cys Met Cys Pro Gly Gly Trp Glu
      725                      730                      735

Gly Thr Thr Cys Asn Ile Ala Arg Asn Ser Ser Cys Leu Pro Asn Pro
      740                      745                      750

Cys His Asn Gly Gly Thr Cys Val Val Asn Gly Glu Ser Phe Thr Cys
      755                      760                      765

Val Cys Lys Glu Gly Trp Glu Gly Pro Ile Cys Ala Gln Asn Thr Asn
      770                      775                      780

Asp Cys Ser Pro His Pro Cys Tyr Asn Ser Gly Thr Cys Val Asp Gly
      785                      790                      795                      800

Asp Asn Trp Tyr Arg Cys Glu Cys Ala Pro Gly Phe Ala Gly Pro Asp
      805                      810                      815

Cys Arg Ile Asn Ile Asn Glu Cys Gln Ser Ser Pro Cys Ala Phe Gly
      820                      825                      830

Ala Thr Cys Val Asp Glu Ile Asn Gly Tyr Arg Cys Val Cys Pro Pro
      835                      840                      845

Gly His Ser Gly Ala Lys Cys Gln Glu Val Ser Gly Arg Pro Cys Ile
      850                      855                      860

Thr Met Gly Ser Val Ile Pro Asp Gly Ala Lys Trp Asp Asp Asp Cys
      865                      870                      875                      880

Asn Thr Cys Gln Cys Leu Asn Gly Arg Ile Ala Cys Ser Lys Val Trp
      885                      890                      895

Cys Gly Pro Arg Pro Cys Leu Leu His Lys Gly His Ser Glu Cys Pro
      900                      905                      910

Ser Gly Gln Ser Cys Ile Pro Ile Leu Asp Asp Gln Cys Phe Val His
      915                      920                      925

Pro Cys Thr Gly Val Gly Glu Cys Arg Ser Ser Ser Leu Gln Pro Val
      930                      935                      940

Lys Thr Lys Cys Thr Ser Asp Ser Tyr Tyr Gln Asp Asn Cys Ala Asn
      945                      950                      955                      960

Ile Thr Phe Thr Phe Asn Lys Glu Met Met Ser Pro Gly Leu Thr Thr
      965                      970                      975

Glu His Ile Cys Ser Glu Leu Arg Asn Leu Asn Ile Leu Lys Asn Val
      980                      985                      990

Ser Ala Glu Tyr Ser Ile Tyr Ile Ala Cys Glu Pro Ser Pro Ser Ala
      995                      1000                      1005

Asn Asn Glu Ile His Val Ala Ile Ser Ala Glu Asp Ile Arg Asp
      1010                      1015                      1020

Asp Gly Asn Pro Ile Lys Glu Ile Thr Asp Lys Ile Ile Asp Leu
      1025                      1030                      1035

Val Ser Lys Arg Asp Gly Asn Ser Ser Leu Ile Ala Ala Val Ala
      1040                      1045                      1050

Glu Val Arg Val Gln Arg Arg Pro Leu Lys Asn Arg Thr Asp Phe
      1055                      1060                      1065

Leu Val Pro Leu Leu Ser Ser Val Leu Thr Val Ala Trp Ile Cys
      1070                      1075                      1080

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P11073us seq list updated.ST25.txt

Cys Leu Val Thr Ala Phe Tyr Trp Cys Leu Arg Lys Arg Arg Lys
 1085 1090 1095

Pro Gly Ser His Thr His Ser Ala Ser Glu Asp Asn Thr Thr Asn
 1100 1105 1110

Asn Val Arg Glu Gln Leu Asn Gln Ile Lys Asn Pro Ile Glu Lys
 1115 1120 1125

His Gly Ala Asn Thr Val Pro Ile Lys Asp Tyr Glu Asn Lys Asn
 1130 1135 1140

Ser Lys Met Ser Lys Ile Arg Thr His Asn Ser Glu Val Glu Glu
 1145 1150 1155

Asp Asp Met Asp Lys His Gln Gln Lys Ala Arg Phe Ala Lys Gln
 1160 1165 1170

Pro Ala Tyr Thr Leu Val Asp Arg Glu Glu Lys Pro Pro Asn Gly
 1175 1180 1185

Thr Pro Thr Lys His Pro Asn Trp Thr Asn Lys Gln Asp Asn Arg
 1190 1195 1200

Asp Leu Glu Ser Ala Gln Ser Leu Asn Arg Met Glu Tyr Ile Val
 1205 1210 1215

<210> 38

<211> 1238

<212> PRT

<213> Homo sapiens

<400> 38

Met Arg Ala Gln Gly Arg Gly Arg Leu Pro Arg Arg Leu Leu Leu Leu
 1 5 10 15

Leu Ala Leu Trp Val Gln Ala Ala Arg Pro Met Gly Tyr Phe Glu Leu
 20 25 30

Gln Leu Ser Ala Leu Arg Asn Val Asn Gly Glu Leu Leu Ser Gly Ala
 35 40 45

Cys Cys Asp Gly Asp Gly Arg Thr Thr Arg Ala Gly Gly Cys Gly His
 50 55 60

Asp Glu Cys Asp Thr Tyr Val Arg Val Cys Leu Lys Glu Tyr Gln Ala
 65 70 75 80

Lys Val Thr Pro Thr Gly Pro Cys Ser Tyr Gly His Gly Ala Thr Pro
 85 90 95

Val Leu Gly Gly Asn Ser Phe Tyr Leu Pro Pro Ala Gly Ala Ala Gly
 100 105 110

Asp Arg Ala Arg Ala Arg Ala Arg Ala Gly Gly Asp Gln Asp Pro Gly
 115 120 125

Leu Val Val Ile Pro Phe Gln Phe Ala Trp Pro Arg Ser Phe Thr Leu
 130 135 140

Ile Val Glu Ala Trp Asp Trp Asp Asn Asp Thr Thr Pro Asn Glu Glu
 145 150 155 160

Leu Leu Ile Glu Arg Val Ser His Ala Gly Met Ile Asn Pro Glu Asp

165

170

175

Arg	Trp	Lys	Ser 180	Leu	His	Phe	Ser	Gly 185	His	Val	Ala	His	Leu 190	Glu	Leu
Gln	Ile	Arg 195	Val	Arg	Cys	Asp	Glu 200	Asn	Tyr	Tyr	Ser	Ala 205	Thr	Cys	Asn
Lys	Phe 210	Cys	Arg	Pro	Arg	Asn 215	Asp	Phe	Phe	Gly	His 220	Tyr	Thr	Cys	Asp
Gln 225	Tyr	Gly	Asn	Lys	Ala 230	Cys	Met	Asp	Gly	Trp 235	Met	Gly	Lys	Glu	Cys 240
Lys	Glu	Ala	Val	Cys 245	Lys	Gln	Gly	Cys	Asn 250	Leu	Leu	His	Gly	Gly 255	Cys
Thr	Val	Pro	Gly 260	Glu	Cys	Arg	Cys	Ser 265	Tyr	Gly	Trp	Gln	Gly 270	Arg	Phe
Cys	Asp	Glu 275	Cys	Val	Pro	Tyr	Pro 280	Gly	Cys	Val	His	Gly 285	Ser	Cys	Val
Glu	Pro 290	Trp	Gln	Cys	Asn	Cys 295	Glu	Thr	Asn	Trp	Gly 300	Gly	Leu	Leu	Cys
Asp 305	Lys	Asp	Leu	Asn	Tyr 310	Cys	Gly	Ser	His	His 315	Pro	Cys	Thr	Asn	Gly 320
Gly	Thr	Cys	Ile	Asn 325	Ala	Glu	Pro	Asp	Gln 330	Tyr	Arg	Cys	Thr	Cys 335	Pro
Asp	Gly	Tyr	Ser 340	Gly	Arg	Asn	Cys	Glu 345	Lys	Ala	Glu	His	Ala 350	Cys	Thr
Ser	Asn	Pro 355	Cys	Ala	Asn	Gly	Gly 360	Ser	Cys	His	Glu	Val 365	Pro	Ser	Gly
Phe 370	Glu	Cys	His	Cys	Pro	Ser 375	Gly	Trp	Ser	Gly	Pro 380	Thr	Cys	Ala	Leu
Asp 385	Ile	Asp	Glu	Cys	Ala 390	Ser	Asn	Pro	Cys	Ala 395	Ala	Gly	Gly	Thr	Cys 400
Val	Asp	Gln	Val	Asp 405	Gly	Phe	Glu	Cys	Ile 410	Cys	Pro	Glu	Gln	Trp 415	Val
Gly	Ala	Thr	Cys 420	Gln	Leu	Asp	Ala	Asn 425	Glu	Cys	Glu	Gly	Lys 430	Pro	Cys
Leu	Asn	Ala 435	Phe	Ser	Cys	Lys	Asn 440	Leu	Ile	Gly	Gly	Tyr 445	Tyr	Cys	Asp
Cys	Ile 450	Pro	Gly	Trp	Lys	Gly 455	Ile	Asn	Cys	His	Ile 460	Asn	Val	Asn	Asp
Cys 465	Arg	Gly	Gln	Cys	Gln 470	His	Gly	Gly	Thr	Cys 475	Lys	Asp	Leu	Val	Asn 480
Gly	Tyr	Gln	Cys	Val 485	Cys	Pro	Arg	Gly	Phe 490	Gly	Gly	Arg	His	Cys 495	Glu
Leu	Glu	Arg	Asp 500	Lys	Cys	Ala	Ser	Ser 505	Pro	Cys	His	Ser	Gly 510	Gly	Leu
Cys	Glu	Asp 515	Leu	Ala	Asp	Gly	Phe 520	His	Cys	His	Cys	Pro 525	Gln	Gly	Phe
Ser	Gly 530	Pro	Leu	Cys	Glu	Val 535	Asp	Val	Asp	Leu	Cys 540	Glu	Pro	Ser	Pro

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Cys 545	Arg	Asn	Gly	Ala	Arg 550	Cys	Tyr	Asn	Leu	Glu 555	Gly	Asp	Tyr	Tyr	Cys 560
Ala	Cys	Pro	Asp	Asp 565	Phe	Gly	Gly	Lys	Asn 570	Cys	Ser	Val	Pro	Arg	Glu 575
Pro	Cys	Pro	Gly 580	Gly	Ala	Cys	Arg	Val 585	Ile	Asp	Gly	Cys	Gly	Ser	Asp 590
Ala	Gly 595	Pro	Gly	Met	Pro	Gly	Thr 600	Ala	Ala	Ser	Gly	Val 605	Cys	Gly	Pro
His 610	Gly	Arg	Cys	Val	Ser	Gln 615	Pro	Gly	Gly	Asn	Phe 620	Ser	Cys	Ile	Cys
Asp 625	Ser	Gly	Phe	Thr	Gly 630	Thr	Tyr	Cys	His	Glu 635	Asn	Ile	Asp	Asp	Cys 640
Leu	Gly	Gln	Pro	Cys 645	Arg	Asn	Gly	Gly	Thr 650	Cys	Ile	Asp	Glu	Val	Asp 655
Ala	Phe	Arg	Cys 660	Phe	Cys	Pro	Ser 665	Trp	Glu	Gly	Glu	Leu	Cys	Asp	
Thr	Asn 675	Pro	Asn	Asp	Cys	Leu	Pro 680	Asp	Pro	Cys	His	Ser 685	Arg	Gly	Arg
Cys 690	Tyr	Asp	Leu	Val	Asn	Asp 695	Phe	Tyr	Cys	Ala	Cys 700	Asp	Asp	Gly	Trp
Lys 705	Gly	Lys	Thr	Cys	His 710	Ser	Arg	Glu	Phe	Gln 715	Cys	Asp	Ala	Tyr	Thr 720
Cys	Ser	Asn	Gly	Gly 725	Thr	Cys	Tyr	Asp	Ser 730	Gly	Asp	Thr	Phe	Arg	Cys 735
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Ser	Ser	Cys 755	Leu	Pro	Asn	Pro	Cys 760	Val	Asn	Gly	Gly	Thr 765	Cys	Val	Gly
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Gly	Gly	Ile	Cys	Val 805	Asp	Gly	Val	Asn	Trp 810	Phe	Arg	Cys	Glu	Cys	Ala 815
Pro	Gly	Phe	Ala 820	Gly	Pro	Asp	Cys	Arg 825	Ile	Asn	Ile	Asp	Glu	Cys	Gln 830
Ser	Ser	Pro 835	Cys	Ala	Tyr	Gly	Ala 840	Thr	Cys	Val	Asp	Glu 845	Ile	Asn	Gly
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Val 865	Ile	Gly	Phe	Gly	Arg 870	Ser	Cys	Trp	Ser	Arg 875	Gly	Thr	Pro	Phe	Pro 880
His	Gly	Ser	Ser	Trp 885	Val	Glu	Asp	Cys	Asn 890	Ser	Cys	Arg	Cys	Leu	Asp 895
Gly	Arg	Arg	Asp 900	Cys	Ser	Lys	Val	Trp 905	Cys	Gly	Trp	Lys	Pro	Cys	Leu 910

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 Arg Cys Leu Glu Lys Ala Pro Gly Gln Cys Leu Arg Pro Pro Cys Glu
 930 935 940
 Ala Trp Gly Glu Cys Gly Ala Glu Glu Pro Pro Ser Thr Pro Cys Leu
 945 950 955 960
 Pro Arg Ser Gly His Leu Asp Asn Asn Cys Ala Arg Leu Thr Leu His
 965 970 975
 Phe Asn Arg Asp His Val Pro Gln Gly Thr Thr Val Gly Ala Ile Cys
 980 985 990
 Ser Gly Ile Arg Ser Leu Pro Ala Thr Arg Ala Val Ala Arg Asp Arg
 995 1000 1005
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 1010 1015 1020
 Val Glu Val Ala Val Ser Phe Ser Pro Ala Arg Asp Leu Pro Asp
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 Ser Ser Leu Ile Gln Gly Ala Ala His Ala Ile Val Ala Ala Ile
 1040 1045 1050
 Thr Gln Arg Gly Asn Ser Ser Leu Leu Leu Ala Val Thr Glu Val
 1055 1060 1065
 Lys Val Glu Thr Val Val Thr Gly Gly Ser Ser Thr Gly Leu Leu
 1070 1075 1080
 Val Pro Val Leu Cys Gly Ala Phe Ser Val Leu Trp Leu Ala Cys
 1085 1090 1095
 Val Val Leu Cys Val Trp Trp Thr Arg Lys Arg Arg Lys Glu Arg
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 1115 1120 1125
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 1130 1135 1140
 His Lys Asp Val Leu Tyr Gln Cys Lys Asn Phe Thr Pro Pro Pro
 1145 1150 1155
 Arg Arg Ala Asp Glu Ala Leu Pro Gly Pro Ala Gly His Ala Ala
 1160 1165 1170
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 1175 1180 1185
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 1190 1195 1200
 Asp Pro Gly Arg Ser Pro Gly Arg Pro Ala His Trp Ala Ser Gly
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<211> 2556

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (891)..(891)

<223> X is any amino acid

<400> 39

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Asn Gly Gly Lys Cys Glu Ala Ala Asn Gly Thr Glu Ala Cys Val Cys
35      40      45
Gly Gly Ala Phe Val Gly Pro Arg Cys Gln Asp Pro Asn Pro Cys Leu
50      55      60
Ser Thr Pro Cys Lys Asn Ala Gly Thr Cys His Val Val Asp Arg Arg
65      70      75      80
Gly Val Ala Asp Tyr Ala Cys Ser Cys Ala Leu Gly Phe Ser Gly Pro
85      90      95
Leu Cys Leu Thr Pro Leu Asp Asn Ala Cys Leu Thr Asn Pro Cys Arg
100     105     110
Asn Gly Gly Thr Cys Asp Leu Leu Thr Leu Thr Glu Tyr Lys Cys Arg
115     120     125
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Ser Tyr Ile Cys His Cys Pro Pro Ser Phe His Gly Pro Thr Cys Arg
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Gln Asp Val Asn Glu Cys Gly Gln Lys Pro Arg Leu Cys Arg His Gly
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Gly Thr Cys His Asn Glu Val Gly Ser Tyr Arg Cys Val Cys Arg Ala
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Thr His Thr Gly Pro Asn Cys Glu Arg Pro Tyr Val Pro Cys Ser Pro
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Ser Pro Cys Gln Asn Gly Gly Thr Cys Arg Pro Thr Gly Asp Val Thr
225     230     235     240
His Glu Cys Ala Cys Leu Pro Gly Phe Thr Gly Gln Asn Cys Glu Glu
245     250     255
Asn Ile Asp Asp Cys Pro Gly Asn Asn Cys Lys Asn Gly Gly Ala Cys
260     265     270
Val Asp Gly Val Asn Thr Tyr Asn Cys Pro Cys Pro Pro Glu Trp Thr

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275
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Ala Cys Gln Asn Gly Gly Thr Cys His Asn Thr His Gly Gly Tyr Asn
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Cys Val Cys Val Asn Gly Trp Thr Gly Glu Asp Cys Ser Glu Asn Ile
325 330 335
Asp Asp Cys Ala Ser Ala Ala Cys Phe His Gly Ala Thr Cys His Asp
340 345 350
Arg Val Ala Ser Phe Tyr Cys Glu Cys Pro His Gly Arg Thr Gly Leu
355 360 365
Leu Cys His Leu Asn Asp Ala Cys Ile Ser Asn Pro Cys Asn Glu Gly
370 375 380
Ser Asn Cys Asp Thr Asn Pro Val Asn Gly Lys Ala Ile Cys Thr Cys
385 390 395 400
Pro Ser Gly Tyr Thr Gly Pro Ala Cys Ser Gln Asp Val Asp Glu Cys
405 410 415
Ser Leu Gly Ala Asn Pro Cys Glu His Ala Gly Lys Cys Ile Asn Thr
420 425 430
Leu Gly Ser Phe Glu Cys Gln Cys Leu Gln Gly Tyr Thr Gly Pro Arg
435 440 445
Cys Glu Ile Asp Val Asn Glu Cys Val Ser Asn Pro Cys Gln Asn Asp
450 455 460
Ala Thr Cys Leu Asp Gln Ile Gly Glu Phe Gln Cys Met Cys Met Pro
465 470 475 480
Gly Tyr Glu Gly Val His Cys Glu Val Asn Thr Asp Glu Cys Ala Ser
485 490 495
Ser Pro Cys Leu His Asn Gly Arg Cys Leu Asp Lys Ile Asn Glu Phe
500 505 510
Gln Cys Glu Cys Pro Thr Gly Phe Thr Gly His Leu Cys Gln Tyr Asp
515 520 525
Val Asp Glu Cys Ala Ser Thr Pro Cys Lys Asn Gly Ala Lys Cys Leu
530 535 540
Asp Gly Pro Asn Thr Tyr Thr Cys Val Cys Thr Glu Gly Tyr Thr Gly
545 550 555 560
Thr His Cys Glu Val Asp Ile Asp Glu Cys Asp Pro Asp Pro Cys His
565 570 575
Tyr Gly Ser Cys Lys Asp Gly Val Ala Thr Phe Thr Cys Leu Cys Arg
580 585 590
Pro Gly Tyr Thr Gly His His Cys Glu Thr Asn Ile Asn Glu Cys Ser
595 600 605
Ser Gln Pro Cys Arg Leu Arg Gly Thr Cys Gln Asp Pro Asp Asn Ala
610 615 620
Tyr Leu Cys Phe Cys Leu Lys Gly Thr Thr Gly Pro Asn Cys Glu Ile
625 630 635 640
Asn Leu Asp Asp Cys Ala Ser Ser Pro Cys Asp Ser Gly Thr Cys Leu
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Asp Lys Ile Asp Gly Tyr Glu Cys Ala Cys Glu Pro Gly Tyr Thr Gly
 660 665 670
 Ser Met Cys Asn Ser Asn Ile Asp Glu Cys Ala Gly Asn Pro Cys His
 675 680 685
 Asn Gly Gly Thr Cys Glu Asp Gly Ile Asn Gly Phe Thr Cys Arg Cys
 690 695 700
 Pro Glu Gly Tyr His Asp Pro Thr Cys Leu Ser Glu Val Asn Glu Cys
 705 710 715 720
 Asn Ser Asn Pro Cys Val His Gly Ala Cys Arg Asp Ser Leu Asn Gly
 725 730 735
 Tyr Lys Cys Asp Cys Asp Pro Gly Trp Ser Gly Thr Asn Cys Asp Ile
 740 745 750
 Asn Asn Asn Glu Cys Glu Ser Asn Pro Cys Val Asn Gly Gly Thr Cys
 755 760 765
 Lys Asp Met Thr Ser Gly Ile Val Cys Thr Cys Arg Glu Gly Phe Ser
 770 775 780
 Gly Pro Asn Cys Gln Thr Asn Ile Asn Glu Cys Ala Ser Asn Pro Cys
 785 790 795 800
 Leu Asn Lys Gly Thr Cys Ile Asp Asp Val Ala Gly Tyr Lys Cys Asn
 805 810 815
 Cys Leu Leu Pro Tyr Thr Gly Ala Thr Cys Glu Val Val Leu Ala Pro
 820 825 830
 Cys Ala Pro Ser Pro Cys Arg Asn Gly Gly Glu Cys Arg Gln Ser Glu
 835 840 845
 Asp Tyr Glu Ser Phe Ser Cys Val Cys Pro Thr Ala Gly Ala Lys Gly
 850 855 860
 Gln Thr Cys Glu Val Asp Ile Asn Glu Cys Val Leu Ser Pro Cys Arg
 865 870 875 880
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 885 890 895
 Gln Ala Gly Tyr Ser Gly Arg Asn Cys Glu Thr Asp Ile Asp Asp Cys
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 915 920 925
 Thr Ala Phe Cys Asp Cys Leu Pro Gly Phe Arg Gly Thr Phe Cys Glu
 930 935 940
 Glu Asp Ile Asn Glu Cys Ala Ser Asp Pro Cys Arg Asn Gly Ala Asn
 945 950 955 960
 Cys Thr Asp Cys Val Asp Ser Tyr Thr Cys Thr Cys Pro Ala Gly Phe
 965 970 975
 Ser Gly Ile His Cys Glu Asn Asn Thr Pro Asp Cys Thr Glu Ser Ser
 980 985 990
 Cys Phe Asn Gly Gly Thr Cys Val Asp Gly Ile Asn Ser Phe Thr Cys
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 1010 1015 1020

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Gly	Pro	Asn	Cys	Gln	Asn	Leu	Val	His	Trp	Cys	Asp	Ser	Ser	Pro
1055						1060					1065			
Cys	Lys	Asn	Gly	Gly	Lys	Cys	Trp	Gln	Thr	His	Thr	Gln	Tyr	Arg
1070						1075					1080			
Cys	Glu	Cys	Pro	Ser	Gly	Trp	Thr	Gly	Leu	Tyr	Cys	Asp	Val	Pro
1085						1090					1095			
Ser	Val	Ser	Cys	Glu	Val	Ala	Ala	Gln	Arg	Gln	Gly	Val	Asp	Val
1100						1105					1110			
Ala	Arg	Leu	Cys	Gln	His	Gly	Gly	Leu	Cys	Val	Asp	Ala	Gly	Asn
1115						1120					1125			
Thr	His	His	Cys	Arg	Cys	Gln	Ala	Gly	Tyr	Thr	Gly	Ser	Tyr	Cys
1130						1135					1140			
Glu	Asp	Leu	Val	Asp	Glu	Cys	Ser	Pro	Ser	Pro	Cys	Gln	Asn	Gly
1145						1150					1155			
Ala	Thr	Cys	Thr	Asp	Tyr	Leu	Gly	Gly	Tyr	Ser	Cys	Lys	Cys	Val
1160						1165					1170			
Ala	Gly	Tyr	His	Gly	Val	Asn	Cys	Ser	Glu	Glu	Ile	Asp	Glu	Cys
1175						1180					1185			
Leu	Ser	His	Pro	Cys	Gln	Asn	Gly	Gly	Thr	Cys	Leu	Asp	Leu	Pro
1190						1195					1200			
Asn	Thr	Tyr	Lys	Cys	Ser	Cys	Pro	Arg	Gly	Thr	Gln	Gly	Val	His
1205						1210					1215			
Cys	Glu	Ile	Asn	Val	Asp	Asp	Cys	Asn	Pro	Pro	Val	Asp	Pro	Val
1220						1225					1230			
Ser	Arg	Ser	Pro	Lys	Cys	Phe	Asn	Asn	Gly	Thr	Cys	Val	Asp	Gln
1235						1240					1245			
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1265						1270					1275			
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Cys	Glu	Cys	Arg	Ala	Gly	His	Thr	Gly	Arg	Arg	Cys	Glu	Ser	Val
1295						1300					1305			
Ile	Asn	Gly	Cys	Lys	Gly	Lys	Pro	Cys	Lys	Asn	Gly	Gly	Thr	Cys
1310						1315					1320			
Ala	Val	Ala	Ser	Asn	Thr	Ala	Arg	Gly	Phe	Ile	Cys	Lys	Cys	Pro
1325						1330					1335			
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1340						1345					1350			
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1355						1360					1365			
Arg	Ser	Pro	Thr	Cys	Leu	Cys	Leu	Gly	Pro	Phe	Thr	Gly	Pro	Glu

1370	Cys	Gln	Phe	Pro	Ala	Ser	Ser	Pro	Cys	Leu	Gly	Gly	Asn	Pro	Cys
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1400						1405					1410				
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1430						1435					1440				
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1445						1450					1455				
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1460						1465					1470				
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1475						1480					1485				
Lys	Asn	Cys	Thr	Gln	Ser	Leu	Gln	Cys	Trp	Lys	Tyr	Phe	Ser	Asp	
1490						1495					1500				
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Pro	Met	Asp	Val	Arg	Gly	Ser	Ile	Val	Tyr	Leu	Glu	Ile	Asp	Asn	
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Arg	Gln	Cys	Val	Gln	Ala	Ser	Ser	Gln	Cys	Phe	Gln	Ser	Ala	Thr	
1685						1690					1695				
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Arg	Lys	Arg	Arg	Arg	Gln	His	Gly	Gln	Leu	Trp	Phe	Pro	Glu	Gly
1760						1765					1770			
Phe	Lys	Val	Ser	Glu	Ala	Ser	Lys	Lys	Lys	Arg	Arg	Glu	Pro	Leu
1775						1780					1785			
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1805						1810					1815			
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Gln	Thr	Asp	Arg	Thr	Gly	Glu	Thr	Ala	Leu	His	Leu	Ala	Ala	Arg
1925						1930					1935			
Tyr	Ser	Arg	Ser	Asp	Ala	Ala	Lys	Arg	Leu	Leu	Glu	Ala	Ser	Ala
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Asp	Ala	Asn	Ile	Gln	Asp	Asn	Met	Gly	Arg	Thr	Pro	Leu	His	Ala
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Ala	Val	Ser	Ala	Asp	Ala	Gln	Gly	Val	Phe	Gln	Ile	Leu	Ile	Arg
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Asn	Arg	Ala	Thr	Asp	Leu	Asp	Ala	Arg	Met	His	Asp	Gly	Thr	Thr
1985						1990					1995			
Pro	Leu	Ile	Leu	Ala	Ala	Arg	Leu	Ala	Val	Glu	Gly	Met	Leu	Glu
2000						2005					2010			
Asp	Leu	Ile	Asn	Ser	His	Ala	Asp	Val	Asn	Ala	Val	Asp	Asp	Leu
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Ser	Tyr	Glu	Thr	Ala	Lys	Val	Leu	Leu	Asp	His	Phe	Ala	Asn	Arg
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Glu	Arg	Met	His	His	Asp	Ile	Val	Arg	Leu	Leu	Asp	Glu	Tyr	Asn
2105						2110					2115			
Leu	Val	Arg	Ser	Pro	Gln	Leu	His	Gly	Ala	Pro	Leu	Gly	Gly	Thr
2120						2125					2130			
Pro	Thr	Leu	Ser	Pro	Pro	Leu	Cys	Ser	Pro	Asn	Gly	Tyr	Leu	Gly
2135						2140					2145			
Ser	Leu	Lys	Pro	Gly	Val	Gln	Gly	Lys	Lys	Val	Arg	Lys	Pro	Ser
2150						2155					2160			
Ser	Lys	Gly	Leu	Ala	Cys	Gly	Ser	Lys	Glu	Ala	Lys	Asp	Leu	Lys
2165						2170					2175			
Ala	Arg	Arg	Lys	Lys	Ser	Gln	Asp	Gly	Lys	Gly	Cys	Leu	Leu	Asp
2180						2185					2190			
Ser	Ser	Gly	Met	Leu	Ser	Pro	Val	Asp	Ser	Leu	Glu	Ser	Pro	His
2195						2200					2205			
Gly	Tyr	Leu	Ser	Asp	Val	Ala	Ser	Pro	Pro	Leu	Leu	Pro	Ser	Pro
2210						2215					2220			
Phe	Gln	Gln	Ser	Pro	Ser	Val	Pro	Leu	Asn	His	Leu	Pro	Gly	Met
2225						2230					2235			
Pro	Asp	Thr	His	Leu	Gly	Ile	Gly	His	Leu	Asn	Val	Ala	Ala	Lys
2240						2245					2250			
Pro	Glu	Met	Ala	Ala	Leu	Gly	Gly	Gly	Gly	Arg	Leu	Ala	Phe	Glu
2255						2260					2265			
Thr	Gly	Pro	Pro	Arg	Leu	Ser	His	Leu	Pro	Val	Ala	Ser	Gly	Thr
2270						2275					2280			
Ser	Thr	Val	Leu	Gly	Ser	Ser	Ser	Gly	Gly	Ala	Leu	Asn	Phe	Thr
2285						2290					2295			
Val	Gly	Gly	Ser	Thr	Ser	Leu	Asn	Gly	Gln	Cys	Glu	Trp	Leu	Ser
2300						2305					2310			
Arg	Leu	Gln	Ser	Gly	Met	Val	Pro	Asn	Gln	Tyr	Asn	Pro	Leu	Arg
2315						2320					2325			
Gly	Ser	Val	Ala	Pro	Gly	Pro	Leu	Ser	Thr	Gln	Ala	Pro	Ser	Leu
2330						2335					2340			
Gln	His	Gly	Met	Val	Gly	Pro	Leu	His	Ser	Ser	Leu	Ala	Ala	Ser
2345						2350					2355			
Ala	Leu	Ser	Gln	Met	Met	Ser	Tyr	Gln	Gly	Leu	Pro	Ser	Thr	Arg
2360						2365					2370			
Leu	Ala	Thr	Gln	Pro	His	Leu	Val	Gln	Thr	Gln	Gln	Val	Gln	Pro
2375						2380					2385			
Gln	Asn	Leu	Gln	Met	Gln	Gln	Gln	Asn	Leu	Gln	Pro	Ala	Asn	Ile
2390						2395					2400			
Gln	Gln	Gln	Gln	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Pro	Pro	Gln	Pro
2405						2410					2415			
His	Leu	Gly	Val	Ser	Ser	Ala	Ala	Ser	Gly	His	Leu	Gly	Arg	Ser

2420

2425

2430

Phe Leu Ser Gly Glu Pro Ser Gln Ala Asp Val Gln Pro Leu Gly
 2435 2440 2445

Pro Ser Ser Leu Ala Val His Thr Ile Leu Pro Gln Glu Ser Pro
 2450 2455 2460

Ala Leu Pro Thr Ser Leu Pro Ser Ser Leu Val Pro Pro Val Thr
 2465 2470 2475

Ala Ala Gln Phe Leu Thr Pro Pro Ser Gln His Ser Tyr Ser Ser
 2480 2485 2490

Pro Val Asp Asn Thr Pro Ser His Gln Leu Gln Val Pro Glu His
 2495 2500 2505

Pro Phe Leu Thr Pro Ser Pro Glu Ser Pro Asp Gln Trp Ser Ser
 2510 2515 2520

Ser Ser Pro His Ser Asn Val Ser Asp Trp Ser Glu Gly Val Ser
 2525 2530 2535

Ser Pro Pro Thr Ser Met Gln Ser Gln Ile Ala Arg Ile Pro Glu
 2540 2545 2550

Ala Phe Lys
 2555

<210> 40

<211> 2471

<212> PRT

<213> Homo sapiens

<400> 40

Met Pro Ala Leu Arg Pro Ala Leu Leu Trp Ala Leu Leu Ala Leu Trp
 1 5 10 15

Leu Cys Cys Ala Ala Pro Ala His Ala Leu Gln Cys Arg Asp Gly Tyr
 20 25 30

Glu Pro Cys Val Asn Glu Gly Met Cys Val Thr Tyr His Asn Gly Thr
 35 40 45

Gly Tyr Cys Lys Cys Pro Glu Gly Phe Leu Gly Glu Tyr Cys Gln His
 50 55 60

Arg Asp Pro Cys Glu Lys Asn Arg Cys Gln Asn Gly Gly Thr Cys Val
 65 70 75 80

Ala Gln Ala Met Leu Gly Lys Ala Thr Cys Arg Cys Ala Ser Gly Phe
 85 90 95

Thr Gly Glu Asp Cys Gln Tyr Ser Thr Ser His Pro Cys Phe Val Ser
 100 105 110

Arg Pro Cys Leu Asn Gly Gly Thr Cys His Met Leu Ser Arg Asp Thr
 115 120 125

Tyr Glu Cys Thr Cys Gln Val Gly Phe Thr Gly Lys Glu Cys Gln Trp
 130 135 140

Thr Asp Ala Cys Leu Ser His Pro Cys Ala Asn Gly Ser Thr Cys Thr
 145 150 155 160

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Thr	Val	Ala	Asn	Gln	Phe	Ser	Cys	Lys	Cys	Leu	Thr	Gly	Phe	Thr	Gly	165	170	175
Gln	Lys	Cys	Glu	Thr	Asp	Val	Asn	Glu	Cys	Asp	Ile	Pro	Gly	His	Cys	180	185	190
Gln	His	Gly	Gly	Thr	Cys	Leu	Asn	Leu	Pro	Gly	Ser	Tyr	Gln	Cys	Gln	195	200	205
Cys	Pro	Gln	Gly	Phe	Thr	Gly	Gln	Tyr	Cys	Asp	Ser	Leu	Tyr	Val	Pro	210	215	220
Cys	Ala	Pro	Ser	Pro	Cys	Val	Asn	Gly	Gly	Thr	Cys	Arg	Gln	Thr	Gly	225	230	235
Asp	Phe	Thr	Phe	Glu	Cys	Asn	Cys	Leu	Pro	Gly	Phe	Glu	Gly	Ser	Thr	245	250	255
Cys	Glu	Arg	Asn	Ile	Asp	Asp	Cys	Pro	Asn	His	Arg	Cys	Gln	Asn	Gly	260	265	270
Gly	Val	Cys	Val	Asp	Gly	Val	Asn	Thr	Tyr	Asn	Cys	Arg	Cys	Pro	Pro	275	280	285
Gln	Trp	Thr	Gly	Gln	Phe	Cys	Thr	Glu	Asp	Val	Asp	Glu	Cys	Leu	Leu	290	295	300
Gln	Pro	Asn	Ala	Cys	Gln	Asn	Gly	Gly	Thr	Cys	Ala	Asn	Arg	Asn	Gly	305	310	315
Gly	Tyr	Gly	Cys	Val	Cys	Val	Asn	Gly	Trp	Ser	Gly	Asp	Asp	Cys	Ser	325	330	335
Glu	Asn	Ile	Asp	Asp	Cys	Ala	Phe	Ala	Ser	Cys	Thr	Pro	Gly	Ser	Thr	340	345	350
Cys	Ile	Asp	Arg	Val	Ala	Ser	Phe	Ser	Cys	Met	Cys	Pro	Glu	Gly	Lys	355	360	365
Ala	Gly	Leu	Leu	Cys	His	Leu	Asp	Asp	Ala	Cys	Ile	Ser	Asn	Pro	Cys	370	375	380
His	Lys	Gly	Ala	Leu	Cys	Asp	Thr	Asn	Pro	Leu	Asn	Gly	Gln	Tyr	Ile	385	390	395
Cys	Thr	Cys	Pro	Gln	Gly	Tyr	Lys	Gly	Ala	Asp	Cys	Thr	Glu	Asp	Val	405	410	415
Asp	Glu	Cys	Ala	Met	Ala	Asn	Ser	Asn	Pro	Cys	Glu	His	Ala	Gly	Lys	420	425	430
Cys	Val	Asn	Thr	Asp	Gly	Ala	Phe	His	Cys	Glu	Cys	Leu	Lys	Gly	Tyr	435	440	445
Ala	Gly	Pro	Arg	Cys	Glu	Met	Asp	Ile	Asn	Glu	Cys	His	Ser	Asp	Pro	450	455	460
Cys	Gln	Asn	Asp	Ala	Thr	Cys	Leu	Asp	Lys	Ile	Gly	Gly	Phe	Thr	Cys	465	470	475
Leu	Cys	Met	Pro	Gly	Phe	Lys	Gly	Val	His	Cys	Glu	Leu	Glu	Ile	Asn	485	490	495
Glu	Cys	Gln	Ser	Asn	Pro	Cys	Val	Asn	Asn	Gly	Gln	Cys	Val	Asp	Lys	500	505	510
Val	Asn	Arg	Phe	Gln	Cys	Leu	Cys	Pro	Pro	Gly	Phe	Thr	Gly	Pro	Val	515	520	525

Cys Gln Ile Asp Ile Asp Asp Cys Ser Ser Thr Pro Cys Leu Asn Gly
 530 535 540
 Ala Lys Cys Ile Asp His Pro Asn Gly Tyr Glu Cys Gln Cys Ala Thr
 545 550 555 560
 Gly Phe Thr Gly Val Leu Cys Glu Glu Asn Ile Asp Asn Cys Asp Pro
 565 570 575
 Asp Pro Cys His His Gly Gln Cys Gln Asp Gly Ile Asp Ser Tyr Thr
 580 585 590
 Cys Ile Cys Asn Pro Gly Tyr Met Gly Ala Ile Cys Ser Asp Gln Ile
 595 600 605
 Asp Glu Cys Tyr Ser Ser Pro Cys Leu Asn Asp Gly Arg Cys Ile Asp
 610 615 620
 Leu Val Asn Gly Tyr Gln Cys Asn Cys Gln Pro Gly Thr Ser Gly Val
 625 630 635 640
 Asn Cys Glu Ile Asn Phe Asp Asp Cys Ala Ser Asn Pro Cys Ile His
 645 650 655
 Gly Ile Cys Met Asp Gly Ile Asn Arg Tyr Ser Cys Val Cys Ser Pro
 660 665 670
 Gly Phe Thr Gly Gln Arg Cys Asn Ile Asp Ile Asp Glu Cys Ala Ser
 675 680 685
 Asn Pro Cys Arg Lys Gly Ala Thr Cys Ile Asn Gly Val Asn Gly Phe
 690 695 700
 Arg Cys Ile Cys Pro Glu Gly Pro His His Pro Ser Cys Tyr Ser Gln
 705 710 715 720
 Val Asn Glu Cys Leu Ser Asn Pro Cys Ile His Gly Asn Cys Thr Gly
 725 730 735
 Gly Leu Ser Gly Tyr Lys Cys Leu Cys Asp Ala Gly Trp Val Gly Ile
 740 745 750
 Asn Cys Glu Val Asp Lys Asn Glu Cys Leu Ser Asn Pro Cys Gln Asn
 755 760 765
 Gly Gly Thr Cys Asp Asn Leu Val Asn Gly Tyr Arg Cys Thr Cys Lys
 770 775 780
 Lys Gly Phe Lys Gly Tyr Asn Cys Gln Val Asn Ile Asp Glu Cys Ala
 785 790 795 800
 Ser Asn Pro Cys Leu Asn Gln Gly Thr Cys Phe Asp Asp Ile Ser Gly
 805 810 815
 Tyr Thr Cys His Cys Val Leu Pro Tyr Thr Gly Lys Asn Cys Gln Thr
 820 825 830
 Val Leu Ala Pro Cys Ser Pro Asn Pro Cys Glu Asn Ala Ala Val Cys
 835 840 845
 Lys Glu Ser Pro Asn Phe Glu Ser Tyr Thr Cys Leu Cys Ala Pro Gly
 850 855 860
 Trp Gln Gly Gln Arg Cys Thr Ile Asp Ile Asp Glu Cys Ile Ser Lys
 865 870 875 880
 Pro Cys Met Asn His Gly Leu Cys His Asn Thr Gln Gly Ser Tyr Met
 885 890 895
 Cys Glu Cys Pro Pro Gly Phe Ser Gly Met Asp Cys Glu Glu Asp Ile

900	905	910
Asp Asp Cys Leu Ala Asn Pro Cys Gln Asn Gly Gly Ser Cys Met Asp		
915	920	925
Gly Val Asn Thr Phe Ser Cys Leu Cys Leu Pro Gly Phe Thr Gly Asp		
930	935	940
Lys Cys Gln Thr Asp Met Asn Glu Cys Leu Ser Glu Pro Cys Lys Asn		
945	950	955
Gly Gly Thr Cys Ser Asp Tyr Val Asn Ser Tyr Thr Cys Lys Cys Gln		
	965	970
Ala Gly Phe Asp Gly Val His Cys Glu Asn Asn Ile Asn Glu Cys Thr		
	980	985
Glu Ser Ser Cys Phe Asn Gly Gly Thr Cys Val Asp Gly Ile Asn Ser		
	995	1000
Phe Ser Cys Leu Cys Pro Val Gly Phe Thr Gly Ser Phe Cys Leu		
1010	1015	1020
His Glu Ile Asn Glu Cys Ser Ser His Pro Cys Leu Asn Glu Gly		
1025	1030	1035
Thr Cys Val Asp Gly Leu Gly Thr Tyr Arg Cys Ser Cys Pro Leu		
1040	1045	1050
Gly Tyr Thr Gly Lys Asn Cys Gln Thr Leu Val Asn Leu Cys Ser		
1055	1060	1065
Arg Ser Pro Cys Lys Asn Lys Gly Thr Cys Val Gln Lys Lys Ala		
1070	1075	1080
Glu Ser Gln Cys Leu Cys Pro Ser Gly Trp Ala Gly Ala Tyr Cys		
1085	1090	1095
Asp Val Pro Asn Val Ser Cys Asp Ile Ala Ala Ser Arg Arg Gly		
1100	1105	1110
Val Leu Val Glu His Leu Cys Gln His Ser Gly Val Cys Ile Asn		
1115	1120	1125
Ala Gly Asn Thr His Tyr Cys Gln Cys Pro Leu Gly Tyr Thr Gly		
1130	1135	1140
Ser Tyr Cys Glu Glu Gln Leu Asp Glu Cys Ala Ser Asn Pro Cys		
1145	1150	1155
Gln His Gly Ala Thr Cys Ser Asp Phe Ile Gly Gly Tyr Arg Cys		
1160	1165	1170
Glu Cys Val Pro Gly Tyr Gln Gly Val Asn Cys Glu Tyr Glu Val		
1175	1180	1185
Asp Glu Cys Gln Asn Gln Pro Cys Gln Asn Gly Gly Thr Cys Ile		
1190	1195	1200
Asp Leu Val Asn His Phe Lys Cys Ser Cys Pro Pro Gly Thr Arg		
1205	1210	1215
Gly Leu Leu Cys Glu Glu Asn Ile Asp Asp Cys Ala Arg Gly Pro		
1220	1225	1230
His Cys Leu Asn Gly Gly Gln Cys Met Asp Arg Ile Gly Gly Tyr		
1235	1240	1245
Ser Cys Arg Cys Leu Pro Gly Phe Ala Gly Glu Arg Cys Glu Gly		
1250	1255	1260

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Asp Ile 1265	Asn Glu Cys Leu Ser 1270	Asn Pro Cys Ser Ser 1275	Glu Gly Ser
Leu Asp 1280	Cys Ile Gln Leu Thr 1285	Asn Asp Tyr Leu Cys 1290	Val Cys Arg
Ser Ala 1295	Phe Thr Gly Arg His 1300	Cys Glu Thr Phe Val 1305	Asp Val Cys
Pro Gln 1310	Met Pro Cys Leu Asn 1315	Gly Gly Thr Cys Ala 1320	Val Ala Ser
Asn Met 1325	Pro Asp Gly Phe Ile 1330	Cys Arg Cys Pro Pro 1335	Gly Phe Ser
Gly Ala 1340	Arg Cys Gln Ser Ser 1345	Cys Gly Gln Val Lys 1350	Cys Arg Lys
Gly Glu 1355	Gln Cys Val His Thr 1360	Ala Ser Gly Pro Arg 1365	Cys Phe Cys
Pro Ser 1370	Pro Arg Asp Cys Glu 1375	Ser Gly Cys Ala Ser 1380	Ser Pro Cys
Gln His 1385	Gly Gly Ser Cys His 1390	Pro Gln Arg Gln Pro 1395	Pro Tyr Tyr
Ser Cys 1400	Gln Cys Ala Pro Pro 1405	Phe Ser Gly Ser Arg 1410	Cys Glu Leu
Tyr Thr 1415	Ala Pro Pro Ser Thr 1420	Pro Pro Ala Thr Cys 1425	Leu Ser Gln
Tyr Cys 1430	Ala Asp Lys Ala Arg 1435	Asp Gly Val Cys Asp 1440	Glu Ala Cys
Asn Ser 1445	His Ala Cys Gln Trp 1450	Asp Gly Gly Asp Cys 1455	Ser Leu Thr
Met Glu 1460	Asn Pro Trp Ala Asn 1465	Cys Ser Ser Pro Leu 1470	Pro Cys Trp
Asp Tyr 1475	Ile Asn Asn Gln Cys 1480	Asp Glu Leu Cys Asn 1485	Thr Val Glu
Cys Leu 1490	Phe Asp Asn Phe Glu 1495	Cys Gln Gly Asn Ser 1500	Lys Thr Cys
Lys Tyr 1505	Asp Lys Tyr Cys Ala 1510	Asp His Phe Lys Asp 1515	Asn His Cys
Asn Gln 1520	Gly Cys Asn Ser Glu 1525	Glu Cys Gly Trp Asp 1530	Gly Leu Asp
Cys Ala 1535	Ala Asp Gln Pro Glu 1540	Asn Leu Ala Glu Gly 1545	Thr Leu Val
Ile Val 1550	Val Leu Met Pro Pro 1555	Glu Gln Leu Leu Gln 1560	Asp Ala Arg
Ser Phe 1565	Leu Arg Ala Leu Gly 1570	Thr Leu Leu His Thr 1575	Asn Leu Arg
Ile Lys 1580	Arg Asp Ser Gln Gly 1585	Glu Leu Met Val Tyr 1590	Pro Tyr Tyr
Gly Glu 1595	Lys Ser Ala Ala Met 1600	Lys Lys Gln Arg Met 1605	Thr Arg Arg

Ser	Leu	Pro	Gly	Glu	Gln	Glu	Gln	Glu	Val	Ala	Gly	Ser	Lys	Val
1610						1615					1620			
Phe	Leu	Glu	Ile	Asp	Asn	Arg	Gln	Cys	Val	Gln	Asp	Ser	Asp	His
1625						1630					1635			
Cys	Phe	Lys	Asn	Thr	Asp	Ala	Ala	Ala	Ala	Leu	Leu	Ala	Ser	His
1640						1645					1650			
Ala	Ile	Gln	Gly	Thr	Leu	Ser	Tyr	Pro	Leu	Val	Ser	Val	Val	Ser
1655						1660					1665			
Glu	Ser	Leu	Thr	Pro	Glu	Arg	Thr	Gln	Leu	Leu	Tyr	Leu	Leu	Ala
1670						1675					1680			
Val	Ala	Val	Val	Ile	Ile	Leu	Phe	Ile	Ile	Leu	Leu	Gly	Val	Ile
1685						1690					1695			
Met	Ala	Lys	Arg	Lys	Arg	Lys	His	Gly	Ser	Leu	Trp	Leu	Pro	Glu
1700						1705					1710			
Gly	Phe	Thr	Leu	Arg	Arg	Asp	Ala	Ser	Asn	His	Lys	Arg	Arg	Glu
1715						1720					1725			
Pro	Val	Gly	Gln	Asp	Ala	Val	Gly	Leu	Lys	Asn	Leu	Ser	Val	Gln
1730						1735					1740			
Val	Ser	Glu	Ala	Asn	Leu	Ile	Gly	Thr	Gly	Thr	Ser	Glu	His	Trp
1745						1750					1755			
Val	Asp	Asp	Glu	Gly	Pro	Gln	Pro	Lys	Lys	Val	Lys	Ala	Glu	Asp
1760						1765					1770			
Glu	Ala	Leu	Leu	Ser	Glu	Glu	Asp	Asp	Pro	Ile	Asp	Arg	Arg	Pro
1775						1780					1785			
Trp	Thr	Gln	Gln	His	Leu	Glu	Ala	Ala	Asp	Ile	Arg	Arg	Thr	Pro
1790						1795					1800			
Ser	Leu	Ala	Leu	Thr	Pro	Pro	Gln	Ala	Glu	Gln	Glu	Val	Asp	Val
1805						1810					1815			
Leu	Asp	Val	Asn	Val	Arg	Gly	Pro	Asp	Gly	Cys	Thr	Pro	Leu	Met
1820						1825					1830			
Leu	Ala	Ser	Leu	Arg	Gly	Gly	Ser	Ser	Asp	Leu	Ser	Asp	Glu	Asp
1835						1840					1845			
Glu	Asp	Ala	Glu	Asp	Ser	Ser	Ala	Asn	Ile	Ile	Thr	Asp	Leu	Val
1850						1855					1860			
Tyr	Gln	Gly	Ala	Ser	Leu	Gln	Ala	Gln	Thr	Asp	Arg	Thr	Gly	Glu
1865						1870					1875			
Met	Ala	Leu	His	Leu	Ala	Ala	Arg	Tyr	Ser	Arg	Ala	Asp	Ala	Ala
1880						1885					1890			
Lys	Arg	Leu	Leu	Asp	Ala	Gly	Ala	Asp	Ala	Asn	Ala	Gln	Asp	Asn
1895						1900					1905			
Met	Gly	Arg	Cys	Pro	Leu	His	Ala	Ala	Val	Ala	Ala	Asp	Ala	Gln
1910						1915					1920			
Gly	Val	Phe	Gln	Ile	Leu	Ile	Arg	Asn	Arg	Val	Thr	Asp	Leu	Asp
1925						1930					1935			
Ala	Arg	Met	Asn	Asp	Gly	Thr	Thr	Pro	Leu	Ile	Leu	Ala	Ala	Arg
1940						1945					1950			
Leu	Ala	Val	Glu	Gly	Met	Val	Ala	Glu	Leu	Ile	Asn	Cys	Gln	Ala

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1965

1955	Asp Val	Asn Ala	Val Asp	Asp Asp	His Gly	Lys Ser	Ala Leu	His Trp	
	1970			1975			1980		
	Ala Ala	Ala Val	Asn Asn	Val Val	Glu Ala	Thr Leu	Leu Leu	Leu Lys	
	1985			1990			1995		
	Asn Gly	Ala Asn	Arg Asp	Met Met	Gln Asp	Asn Lys	Glu Glu	Thr Pro	
	2000			2005			2010		
	Leu Phe	Leu Ala	Ala Arg	Glu Glu	Gly Ser	Tyr Glu	Ala Ala	Lys Ile	
	2015			2020			2025		
	Leu Leu	Asp His	Phe Ala	Asn Asn	Arg Asp	Ile Thr	Asp His	Met Asp	
	2030			2035			2040		
	Arg Leu	Pro Arg	Asp Val	Ala Ala	Arg Asp	Arg Met	His His	Asp Ile	
	2045			2050			2055		
	Val Arg	Leu Leu	Asp Glu	Tyr Tyr	Asn Val	Thr Pro	Ser Pro	Pro Gly	
	2060			2065			2070		
	Thr Val	Leu Thr	Ser Ala	Leu Leu	Ser Pro	Val Ile	Cys Gly	Pro Asn	
	2075			2080			2085		
	Arg Ser	Phe Leu	Ser Leu	Lys Lys	His Thr	Pro Met	Gly Lys	Lys Ser	
	2090			2095			2100		
	Arg Arg	Pro Ser	Ala Lys	Ser Ser	Thr Met	Pro Thr	Ser Leu	Pro Asn	
	2105			2110			2115		
	Leu Ala	Lys Glu	Ala Lys	Asp Asp	Ala Lys	Gly Ser	Arg Arg	Lys Lys	
	2120			2125			2130		
	Ser Leu	Ser Glu	Lys Val	Gln Gln	Leu Ser	Glu Ser	Ser Val	Thr Leu	
	2135			2140			2145		
	Ser Pro	Val Asp	Ser Leu	Glu Glu	Ser Pro	His Thr	Tyr Val	Ser Asp	
	2150			2155			2160		
	Thr Thr	Ser Ser	Pro Met	Ile Ile	Thr Ser	Pro Gly	Ile Leu	Gln Ala	
	2165			2170			2175		
	Ser Pro	Asn Pro	Met Leu	Ala Ala	Thr Ala	Ala Pro	Pro Ala	Pro Val	
	2180			2185			2190		
	His Ala	Gln His	Ala Leu	Ser Ser	Phe Ser	Asn Leu	His Glu	Met Gln	
	2195			2200			2205		
	Pro Leu	Ala His	Gly Ala	Ser Ser	Thr Val	Leu Pro	Ser Val	Ser Gln	
	2210			2215			2220		
	Leu Leu	Ser His	His His	Ile Ile	Val Ser	Pro Gly	Ser Gly	Ser Ala	
	2225			2230			2235		
	Gly Ser	Leu Ser	Arg Leu	His His	Pro Val	Pro Val	Pro Ala	Asp Trp	
	2240			2245			2250		
	Met Asn	Arg Met	Glu Val	Asn Asn	Glu Thr	Gln Tyr	Asn Glu	Met Phe	
	2255			2260			2265		
	Gly Met	Val Leu	Ala Pro	Ala Ala	Glu Gly	Thr His	Pro Gly	Ile Ala	
	2270			2275			2280		
	Pro Gln	Ser Arg	Pro Pro	Glu Glu	Gly Lys	His Ile	Thr Thr	Pro Arg	
	2285			2290			2295		
	Glu Pro	Leu Pro	Pro Ile	Val Val	Thr Phe	Gln Leu	Ile Pro	Lys Gly	
	2300			2305			2310		

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Ser Ile 2315	Ala Gln Pro Ala Gly 2320	Ala Pro Gln Pro Gln 2325	Ser Thr Cys
Pro Pro 2330	Ala Val Ala Gly Pro 2335	Leu Pro Thr Met Tyr 2340	Gln Ile Pro
Glu Met 2345	Ala Arg Leu Pro Ser 2350	Val Ala Phe Pro Thr 2355	Ala Met Met
Pro Gln 2360	Gln Asp Gly Gln Val 2365	Ala Gln Thr Ile Leu 2370	Pro Ala Tyr
His Pro 2375	Phe Pro Ala Ser Val 2380	Gly Lys Tyr Pro Thr 2385	Pro Pro Ser
Gln His 2390	Ser Tyr Ala Ser Ser 2395	Asn Ala Ala Glu Arg 2400	Thr Pro Ser
His Ser 2405	Gly His Leu Gln Gly 2410	Glu His Pro Tyr Leu 2415	Thr Pro Ser
Pro Glu 2420	Ser Pro Asp Gln Trp 2425	Ser Ser Ser Ser Pro 2430	His Ser Ala
Ser Asp 2435	Trp Ser Asp Val Thr 2440	Thr Ser Pro Thr Pro 2445	Gly Gly Ala
Gly Gly 2450	Gly Gln Arg Gly Pro 2455	Gly Thr His Met Ser 2460	Glu Pro Pro
His Asn 2465	Asn Met Gln Val Tyr 2470	Ala	